

## CLAIMS

1. A method to compensate for process variations when printing a pattern on a workpiece, said method comprising:

    determining a two-dimensional CD profile in said pattern printed on said workpiece,

    generating a two-dimensional compensation file to equalize fluctuations in said two-dimensional CD-profile, and

    patterning a workpiece with said two-dimensional compensation file.

2. The method of claim 1, wherein said determining includes predicting the two-dimensional CD profile.

3. The method of claim 1, wherein said determining includes measuring the two-dimensional CD profile.

4. The method of claim 1, wherein said two-dimensional compensation file includes pattern data.

5. The method of claim 1, wherein said two-dimensional compensation file includes dose compensation data.

6. The method of claim 1, wherein said two-dimensional compensation file is a correction map.

7. The method of claim 1, wherein said two-dimensional compensation file is a two-dimensional dose compensation profile.

8. A method to compensate for process variations when printing a pattern on a workpiece, said method comprising:

    determining a two-dimensional CD profile in said pattern printed on said workpiece,

generating a two-dimensional dose compensation profile to equalize fluctuations in said two-dimensional CD-profile, and

patterning a workpiece with said two-dimensional dose compensation profile.

9. A method to compensate for process variations when printing a pattern on a workpiece, said method comprising:

predicting a two-dimensional CD profile in said pattern to be printed on said workpiece,

generating a two-dimensional dose compensation profile to equalize fluctuations in said 2-dim CD-profile,

patterning the workpiece with said 2-dim dose compensation profile.